UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,816	04/14/2004	Nicholas T. Lange	04843-046001 / MCL 2558	5628
26161 7590 03/22/2007 FISH & RICHARDSON PC P.O. BOX 1022			EXAMINER SHRIVASTAV, BRIJ B	
			2859	
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MOR	NTHS	03/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Exchange to mine may be available under the protections of 70° GR1.13(d). In one vent, Neweric, may a reply be limity filled.  If NO petiod for reply is pecified above, the maximum stabilitory period will apply and will expire SIX (8) MONTHS from the mailing date of this communication.  - Failurs to eyilly within the set or extended seriod for regly is pecified above, the maximum stabilitory period will apply and will expire SIX (8) MONTHS from the mailing date of this communication.  - Failurs to eyilly within the set or extended seriod for regly will be status to extended patient from adjustment. See 37 CFR 1.740(4).  - Status  -		Application No.	Applicant(s)					
Brij B. Shrivastav  2859  Period for Repty  A SHORTENEO STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  A SHORTENEO STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  If No period for reply is specified above, the maximum statutory period will apply and will expert ESK (8) MONTH'S from the mailing date of this communication.  If No period for reply is specified above, the maximum statutory period will apply and will expert ESK (8) MONTH'S from the mailing date of this communication.  If No period for reply is specified above, the maximum statutory period will apply and will expert ESK (8) MONTH'S from the mailing date of this communication.  If No period for reply is specified above, the maximum statutory period will apply and will expert ESK (8) MONTH'S from the mailing date of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication, even if limity filed, may reduce any surround part of the period of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication, even if limity filed, may reduce any surround part of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication, even if limity filed, may reduce any surround part of the mailing date of this communication.  It is a surround part of the profity do		10/823,816	LANGE, NICHOLAS T.					
Proincid for Repty  Portical for Repty  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Estimates of term may be available usine the providuous of 37 CFR 13(6s). In owe early, nower, first any a tripy to terminy the discount for the providuous of 37 CFR 13(6s). In owe early, nower, first any a tripy to terminy the communication of the first own and the providuous of 37 CFR 13(6s). But the state of the providuous of the providuous of the state of the st	Office Action Summary	Examiner	Art Unit					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***property of part (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONTHS from the mailing date of his communication.  ***are first (s) MONT		Brij B. Shrivastav	2859					
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of term may be available under the provisions of 30 FR 11360, in no event, thowers, may a reply be timely filled after SX (b) MONTHS from the mailing date of this communication. If NO provide may be applied under the provisions of 30 FR 11360, in no event, thowers, may a reply be timely filled after SX (b) MONTHS from the mailing date of this communication. If NO provides the time of the communication will apply and will expire SX (b) MONTHS from the mailing date of this communication. If NO provides the time of the communication of the mailing date of this communication, even if Immely filled, may reduce any reduce an	The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
This action is FINAL.   2b)   This action is non-final.   3)   Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.	<ul> <li>WHICHEVER IS LONGER, FROM THE MAILING DA</li> <li>Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If NO period for reply is specified above, the maximum statutory period w</li> <li>Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing</li> </ul>	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim iill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
2a  This action is FINAL. 2b)  This action is non-final.  3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4)  Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) 1-15 is/are rejected.  7)  Claim(s) is/are objected to. 8)  Claim(s) 1-15 is/are rejected.  7)  Claim(s) are subject to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) Notice of Unahsperson's Patent Drawing Review (PTO-948)  5) Notice of Oraftsperson's Patent Drawing Review (PTO-948)  5) Notice of Draftsperson's Patent Drawing Review (PTO-948)  6) Notice of Draftsperson's Patent Drawing Review (PTO-948)  6) Notice of Draftsperson's	Status	,						
2a  This action is FINAL.  2b  This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-15 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1-15 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) 1-15 is/are rejected.  7) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. Sea 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. Sea 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(e)  1) Notice of Draftsperson's Patent Drawing Review (PTO-948)  2) Information Disclosure Statement(s) (PTO/SB/08)  3) Hollog of Informal Patent Application  6) Other:  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date 2  4) Notice of Oraftsperson's Patent Drawing Review (PTO-948)  5) Notice of Oraftsperson's Patent Drawing Review (PTO-948)  5) Notice o	1) Responsive to communication(s) filed on 19 Ap	oril 2004.						
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4)  Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) 1-15 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) 1-15 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) 1-15 is/are rejected. 7)  The grecification is objected to by the Examiner. 10)  The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Application Papers  9)  The specification is objected to by the Examiner. 10)  The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)  All b)  Some * c) None of:		•						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  Attachment(s) 1) Notice of Partsperson's Patent Drawing Review (PTO-948) 3) Notice of Informal Patent Application Paper No(s)/Mail Date 8/19/04 & 12/2205.	/	<del></del>						
Claim(s) 1-15 is/are pending in the application.   4a) Of the above claim(s) is/are withdrawn from consideration.   5]	· · ·	·						
4a) Of the above claim(s) is/are withdrawn from consideration.  5)	Disposition of Claims							
4a) Of the above claim(s) is/are withdrawn from consideration.  5)	4) Claim(s) 1-15 is/are pending in the application.							
5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)								
6)  Claim(s) 1-15 is/are rejected. 7)  Claim(s)  is/are objected to. 8)  Claim(s)  is/are objected to. 8)  Claim(s)  is/are objected to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner. 10)  The drawing(s) filed on  is/are: a) accepted or b) objected to by the Examiner.   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)  All b)  Some * c) None of: 1.  Certified copies of the priority documents have been received. 2.  Certified copies of the priority documents have been received in Application No. 3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1)  Notice of References Cited (PTO-892)   Notice of Informal Patent Application 5)  Notice of Informal Patent Application 6)  Other:								
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of Paferences Cited (PTO-892)  Author Paper No(s)/Mail Date.  Paper No(s)/Mail Date.  Paper No(s)/Mail Date.  1) Notice of Informal Patent Application  6) Other:	, —, · · · <del></del>	· — · · · · · · · · · · · · · · · · · ·						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  Author Paper No(s)/Mail Date  Paper No(s)/Mail Date  Paper No(s)/Mail Date  Notice of Informal Patent Application  Paper No(s)/Mail Date  Notice o								
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  Paper No(s)/Mail Date.  Paper No(s)/Mail Date.  5) Notice of Informal Patent Application  6) Other:  Notice of Informal Patent Application  6) Other:	,	election requirement.						
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  Paper No(s)/Mail Date  1) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:  10 Other:  10 Other:  11 Notice of Informal Patent Application  12 Notice of Informal Patent Application  13 Notice of Informal Patent Application  14 Notice of Informal Patent Application  15 Notice of Informal Patent Application  16 Other:	Application Papers							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/19/04 & 12/2205.  6) Other:		<b>.</b>	•					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some colongold None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/19/04 & 12/2205.  6) Other:  11 Other:  12 Other:  13 Notice of Informal Patent Application  14 Other:  15 Notice of Informal Patent Application  16 Other:  17 Other:  18 Others			Evaminer					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) Notice of Informal Patent Application Paper No(s)/Mail Date 8/19/04 & 12/2205.	·							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/19/04 & 12/2205.  5) Notice of Informal Patent Application  6) Other:	•							
Priority under 35 U.S.C. § 119  12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/19/04 & 12/2205.  5) Notice of Informal Patent Application 6) Other:								
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205.  6) ☐ Other:	11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form F10-132.					
a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205.  6) Other:	Priority under 35 U.S.C. § 119							
2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205.  10 Notice of Informal Patent Application 11 Other:	-	priority under 35 U.S.C. § 119(a)	)-(d) or (f).					
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205.  5) ☐ Notice of Informal Patent Application 6) ☐ Other:	1. Certified copies of the priority documents	s have been received.						
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205.  5) ☐ Notice of Informal Patent Application 6) ☐ Other:	2. Certified copies of the priority documents	s have been received in Applicati	on No					
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1)   Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  2)   Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/19/04 & 12/2205  Other:	•							
* See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1)  Notice of References Cited (PTO-892)  2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  3)  Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/19/04 & 12/2205.  **Notice of Informat Patent Application of the certified copies not received.  4)  Notice of References Cited (PTO-413)  Paper No(s)/Mail Date.  1)  Notice of Informat Patent Application of the certified copies not received.								
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/19/04 & 12/2205.  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205 4) Interview Summary (PTO-413) Paper No(s)/Mail Date  5) Notice of Informal Patent Application Other:		·						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205 4) Interview Summary (PTO-413) Paper No(s)/Mail Date  5) Notice of Informal Patent Application Other:								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205 4) Interview Summary (PTO-413) Paper No(s)/Mail Date  5) Notice of Informal Patent Application Other:	Attachment(s)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/19/04 & 12/2205. Paper No(s)/Mail Date 8/19/04 & 12/2205. Paper No(s)/Mail Date 8/19/04 & 12/2205.								
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/19/04 & 12/2205  5) Notice of Informal Patent Application 6) Other:	2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date							
	3) Information Disclosure Statement(s) (PTO/SB/08)		Patent Application					
		o) [	·					

Application/Control Number: 10/823,816

Art Unit: 2859

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 101

## 1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-15 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter. Claims 8-15 present a computer readable medium. This computer readable medium is considered to be a data structure that does not define any functional interrelationships with the other claimed aspects of the invention which permit the data structure's functionality to be realized. It has been held that such a data structure is considered to be non-statutory under 35 U.S.C. 101 (see Warmerdam 33 F.3d at 1361. 31 USPQZd at 1760). Further, apart from the utility requirement of 35 U.S.C. 101, usefulness under the present eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement (see Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036). A claim is limited to a practical application when the process as claimed produces a concrete, tangible and useful result; i.e. the process recites a step or act of producing something that is concrete, tangible and useful. Merely claiming nonfunctional descriptive material stored in a computer readable medium, without "useful, concrete and tangible" result to have a practical application, does not make the invention eligible for patenting.

Application/Control Number: 10/823,816

Art Unit: 2859

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basser et al (US 5,539,310), and further in view of deCharms et al (US 6,996,261).

As regards to Claims 1 and 8, Basser et al teach a method and a computer readable medium to estimate a value of a diffusion tensor from DT-MRI data obtained on a plurality of test subjects (figures 1,3,4, 6 and 8; column 3-15, 17-19). Basser et al do not teach determining intra-subject and inter-subject variations in said data, and on the basis of the first and second values determining subject specific additive offset for adjusting the DT-MRI data. deCharms et al teach determining intra-subject and intersubject variations in said data, and on the basis of the first and second values determining subject specific additive offset for adjusting the DT-MRI data (paragraphs 439, 449, 465, 471, 512, 600 and 645). It would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt teaching of deCharms et al with the teaching of Basser et al to improve real time data improving data quality.

As regards to claims 2-5, 9-12, 15, Basser et al further teach generating adjusted data to generate a plot, having estimation and obtaining diffusion tensor data (column 3-15, 17-19).

Application/Control Number: 10/823,816

Art Unit: 2859

As regards to claims 6, 7 and 13-15, Basser et al do not specifically average intra-subject and inter-subject variances, which deCharms et al do (column 2-4,17,18). It would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt teaching of deCharms et al with the teaching of Basser et al to improve data quality by obtaining data in real time basis:

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brij B. Shrivastav whose telephone number is 571-272-2250. The examiner can normally be reached on 7 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 16, 2007

Brij B Shrivastav

BRIJ SHRIVASTAV PRIMARY EXAMINER